



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.



FORMER AND PRESENT RANGE OF THE CAROLINA PAROQUET.

(Boundary of former range shown by the heavy line; present distribution by solid black.)

THE CAROLINA PAROQUET (*CONURUS CAROLINENSIS*).

BY EDWIN M. HASBROUCK.

FOR MANY years it has been a recognized fact that the Carolina Paroquet (*Conurus carolinensis*) is fast approaching extermination, the last quarter of a century having witnessed such rapid diminution in its numbers and so great a restriction in its range that, "in the opinions of the best judges, twenty years hence it will be known only in history and from museum specimens." In view of this it has seemed desirable to present a monograph of the sole representative of the Parrot family in the United States, illustrated with a map, showing its former range, and as nearly as possible its present distribution.

The genus *Conurus* is exclusively American, and was first characterized by Kuhl in 1820, who referred to it eighty-one species. In 1610-12 the Carolina Paroquet was first mentioned by Strachey,* with the customary brevity and crudeness of the time, and in 1758 Linnæus gave the first systematic description of it under the generic name of *Psittacus* (all Parrots, from whatever country, being at that time grouped in this genus). Kuhl, however, was the first to separate the Paroquets from the true Parrots, and his list of eighty-one species by subsequent eliminations has been reduced to about fifty, distributed over Mexico, Central, and the whole of South America, with the present species—by far the most beautiful of all—as the sole representative of the genus in the United States.

In comparing the disappearance of the Paroquet with the rapid extermination of other well known birds, one cannot fail to see a similarity between the several cases, and note in each the ruthless and wanton destruction wielded by the hand of man. The Great Auk and Labrador Duck are birds of the past, yet fifty years ago they were plentiful on our eastern coast. The Passenger Pigeons formerly swarmed by millions throughout the States east of the Plains,—today they are a rarity, and their nesting places, which once excited the curiosity of the world, and served as a source

* The Historie of Travaile into Virginia Brittania, by William Strachey, 1610-12.

of revenue to hundreds, are now either abandoned or so far removed from the haunts of man as to be unknown.†

As early as 1832, Audubon speaks of the Paroquet as being not nearly so common as formerly, and from that time till the present they have been becoming less and less numerous until now they are confined to limited areas, and even here are comparatively scarce. In glancing at that portion of the map bounded by the heavy line (representing the area over which they formerly extended), we are amazed at the extent of territory they formerly covered, and can form some little idea of the persecutions to which they have been subjected to totally drive them from their haunts into the isolated regions they are known to inhabit at present. These persecutions (according to all accounts) were not wholly unmerited, as Audubon and Wilson both speak of the destruction caused by these birds among fruit orchards, seemingly out of pure mischief. The former relates an instance of which he himself was an eye witness: — The orchard of a certain fruit grower was visited at the season when buds were developing into fruit, by an immense flock of Paroquets, and in a few hours was completely stripped by them; the birds working in regular manner from tree to tree, and failing so far as he could observe to make use of any of the spoils as food. Naturally, he continues, such depredations were not to be perpetrated with impunity, and retaliation was meted out in the shape of death to as many as could be killed. Unfortunately for the evil doers, a habit peculiar with them is that of knowing little or no fear of fire arms and the wounding of an individual is but the signal for the practical extermination of the entire flock: returning again and again to the scene of slaughter, they fly screaming over their dead companions, falling an easy prey to the marksman who has but to load and fire at pleasure until the numbers become too few or too scattering to make it worth the while. This one peculiar trait is what has apparently led to their rapid disappearance, for the punishment, merited to a certain extent as previously stated, was not visited with a due amount of discretion—which may be said to be the rule rather than the exception in the case of an irate farmer with a shot gun. This, coupled with the shooting for sport (?) by pot-hunters, etc., has practically exterminated one of the most beautiful birds that graced the American continent.

† Auk, VI, 1887, p. 285.

Happily the species is still extant, but in what numbers, or how long it will continue to exist it is of course impossible to say. In the western part of the Indian Territory, and in South Florida, the birds are still to be found, but in regions so inaccessible, and so far from human habitations as to be almost unknown. In the winter of 1888-89, Mr. F. M. Chapman made careful investigations in Florida upon which is based the latter part of the above statement; while, as regards the Indian Territory, a considerable amount of reliable information assures us that it was found as recently as 1889.

Turning now to the map we find that of the forty-four States and five Territories comprising our country, there are records of the occurrence of this species in twenty-two States and one Territory, and the almost absolute certainty of its having strayed into at least five more, making a total of twenty-seven States and one Territory over which it formerly ranged. If we take the forty, third parallel as the northern limit, the twenty-sixth as the most southern, the seventy-third and one hundred and sixth meridians as the eastern and western boundaries respectively, we will have included very nearly all the country in which the Paroquet formerly lived. It will of course be understood that to lay down an exact boundary for any one species is impossible, as where it occurs near the border of a certain State, there is no apparent reason for its not crossing the few intervening miles of country and paying occasional visits to adjacent States, and unless accidentally observed by some one familiar with the importance of such visit the occurrence would go unrecorded. Therefore where we have a record of the Paroquet as formerly common over the whole of a certain State, we may reasonably assume that the border of an adjoining one was occasionally visited, although no record may exist of its having been observed. As an instance both New Jersey and Delaware are without record, yet Maryland and Pennsylvania were formerly visited by them, and there is evidence of its occurring as far north as central New York; in the face of which it is highly probable that both of the above mentioned States were resorted to although not included in the scope of distribution.

In further explanation it will perhaps be best to state, that in drawing the boundary line of the former range I have used the extreme records as boundaries, and a line drawn from one to the other as the extent of the former distribution; it is highly probable, however, that, in some of the extreme records, the birds followed

up some one of the river valleys without wandering over intermediate territory.

As regards the general habits of the Paroquets, there is apparently nothing of interest to be added to the accounts already published. That they are a hardy race is evinced by the appearance of a flock in midwinter at Albany, New York. Nuttall states* that they are so hardy as to appear at St. Louis in the depth of winter, while Wilson recounts† his meeting with a flock on the Ohio in a snow-storm, the birds "flying about like Pigeons and in full cry." This is so greatly at variance with the general habits of Parrots, which are always looked upon as birds of a warm climate, that it does not seem out of place to quote these statements in the present paper.

As to the breeding habits, we have two accounts widely different from each other, both of which, all things considered, we are bound to accept. Audubon and Wilson were the first to inform us concerning the nest and eggs, both of whom distinctly state that they breed in companies in hollow trees. Since the time of these writers, owing to various conflicting accounts, their manner of nesting has been considerably in doubt, but in 1889 light was thrown on the subject by Mr. Wm. Brewster, who wrote‡ as follows: "While in Florida during February and March, 1889, I questioned everybody whom I met regarding the nesting of the Parrakeet. Only three persons professed any knowledge on this subject. The first two were both uneducated men—professional hunters of alligators and plume birds. Each of them claimed to have seen Parrakeets' nests, which they described as flimsy structures built of twigs and placed on the branches of cypress trees. One of them said he had found a nest only the previous summer (1888), while fishing. By means of his pole he tipped the nest over and secured two young birds which it contained. This account was so widely at variance with what has been previously recorded regarding the nesting of this species that I considered it, at the time, as a mere fabrication, but afterwards it was unexpectedly and most strongly corroborated by Judge R. L. Long of Tallahassee. The latter gentleman . . . assured me that he had examined many nests of the Parrakeet built precisely as above des-

*Man. Orn., I, 1832, p. 546.

†Am. Orn., III, 1811, p. 90.

‡Auk, VI, 1889, p. 336.

cribed. Formerly, when the birds were abundant in the surrounding region, he used to find them breeding in large colonies in the cypress swamps. Several of these colonies contained at least a thousand birds each. They nested invariably in small cypress trees, the favorite position being on a fork near the end of a slender horizontal branch. Every such fork would be occupied, and he has seen as many as forty or fifty nests in one small tree. Their nests closely resembled those of the Carolina Dove, being similarly composed of cypress twigs put together so loosely that the eggs were often visible from the ground beneath. The twigs of the cypress seemed to be preferred to those of any other kind of tree. The height at which the nests were placed varied from five or six feet to twenty or thirty feet. Mr. Long described the eggs as being of a greenish white color, unspotted. He did not remember the maximum number which he had found in one set, but thought it was at least four or five. He had often taken young birds from the nest to rear or to give to his friends." It seems difficult to reconcile such testimony with the statements of Audubon and Wilson, already alluded to, yet it may be that, like some of our Owls, the Paroquet nests, according to circumstances, either in hollows or on branches.

In the collection of the National Museum is a series of eight eggs; the majority of them were laid in confinement, the remainder coming from Louisiana. These are pure white in color and average 27×35 mm.

According to Barton, writing in 1790, a flock of Paroquets appeared in January about twenty-five miles northwest of Albany, New York, causing great alarm among the simple Dutch folk who looked upon the advent of the birds as indicative of coming evil. Audubon also states,* that about 1807 they could be procured "as far northeast as Lake Ontario." This is presumably the most northern record for the species, and these are the only instances known of its occurrence in the Empire State. New Jersey and Delaware, as before stated, are without records, but in 1832 Nuttall informs† us that "straggling parties have been seen in the valley of the Juniata in Pennsylvania"; and Turnbull, in 1869, writes‡ that it occurs at rare intervals in the southern part of the State.

* Birds of Am., Vol. IV, p. 309.

† Man. Orn., I, 1832, p. 546.

‡ Birds of Eastern Pa., p. 4, 1869.

For Maryland and the District of Columbia the records are limited to the flock that appeared at the Capital in 1865; this flock, according to Smith and Palmer,* was a large one, as it left numbers of its company with the gunners who were on the marshes at the time of its appearance; but unfortunately there is evidence of only one specimen having been preserved.

For the Virginias I quote from the admirable paper by Rives ('Birds of the Virginias')† who says: "Although a flock was seen as recently as 1865 [the same as that recorded for Maryland and the District], it can no longer be regarded as a Virginia bird, though formerly not uncommon." Catesby also mentions‡ the Paroquet in 1731 as ranging as far north as Virginia, but, as was usual at that time, omitted any definite locality. North Carolina has but one record—that by Catesby, but in South Carolina Burnett gives it§ as being resident in the Pine Barrens in 1851, while Coues in his 'Synopsis'¶ writes: "This species is given in Prof. Gibbs' list, and appeared to have been in former times a common bird, but its occurrence has not been noted for years." Georgia furnishes a good example of a missing link in the chain of history; very little systematic work has been done in this State, and there appear to be no lists of the birds inhabiting it. It is plainly evident that the species formerly lived there although no record of it may exist.

Florida was at all times the home of the Paroquet, but it would appear from Taylor's account¶ that as recently as 1862 they were common throughout the State. In 1874 they were becoming scarce even here, although Ober reported** them as still abundant along the Upper Kissimmee River, and a few flocks seen near Okeechobee. In 1875 they visited Volusia County in immense numbers††, and in 1880 a large flock made its appearance, since when none have been seen in that locality. In 1885 a small colony was known to breed in Waukulla swamp, about

*Auk, V, 1888, p. 148.

†Proc. Newport Nat. Hist. Soc., Doc. VII, 1889-90, p. 64.

‡Nat. Hist. Carolina, Florida and Bahamas, 1731, p. 11.

§Proc. Bost. Soc. Nat. Hist., IV, 1851, p. 116.

¶Proc. Bost. Soc. Nat. Hist., 1868, p. 119.

¶Ibis, IV, 1862, p. 127-142, 197-207.

**Forest and Stream, II, 1874, p. 162.

††Forest and Stream, XXIV, 1885, p. 487.

twenty miles from Tallahassee,* and it may be supposed with a reasonable amount of certainty to occur there at present in moderate numbers. Four handsome specimens of this Parrot in my collection were taken at Thonotosassa, Hillsborough County, on April 25, 1887, by Mr. Chas. Steacy, who writes me that these are the only ones he has seen for some time, and that the occurrence of the birds in that vicinity has not come under his notice since the above date. Brewster,* writing in 1889, affirms that "A few are still found as far north as the Weekiva River bottom, while south of Kissimmee they are still actually abundant over a region of considerable extent." If this be true it is evident that the region must be confined mainly to the interior, as the value of the birds is so well known that had they appeared on the coast, some of the many collectors would have been almost certain to have observed them. In partial support of both Mr. Brewster's statement and my theory, the following from Mr. W. E. D. Scott† may be of value: "With the settlement of the State this species has gradually disappeared till at the present time it must be regarded as a rare bird, though once so abundant and conspicuous. In the winter of 1875-76 the birds were very abundant at Panasoffkee Lake, and the same season I saw many flocks on the Ocklawaha River. About Tarpon Springs they were formerly very common. . . . For the last five years but *one* small flock of some ten birds has been seen in this vicinity.

. . . At a point in Hernando County, in the vicinity of a place called Linden, the birds are still fairly common, and I have procured a series from that place the past winter (1888-89). . . . Mr. Atkins writes me: 'I have in my collection several specimens, and have seen others from time to time that were taken in the Okeechobee region where the birds seem to be fairly common.' "

In the spring of 1889, Mr. F. M. Chapman made careful search for the Paroquet on the eastern coast of Florida in the vicinity of Micco.‡ It was his good fortune to find "in all about fifty birds, in flocks of from six to twenty," thus proving that they are still to be found in the wilder and less thickly settled portion of the State, while Mr. F. S. Risely, of Rockledge, in-

*Auk, VI, 1889, p. 337.

†Auk, VI, 1889, p. 249.

‡Proc. Linn. Soc. N. Y., 1890, p.

forms me that he had one specimen brought to him the past winter (1890-91).

In 1859, Gosse speaks* of the species in such terms as to leave us somewhat in doubt as to whether it was of common occurrence in Alabama at that date, while in 1878 (the latest record from the State), Mr. N. C. Brown refers to it† as being rather uncommon in the vicinity of Coosada during his stay, and invariably quite shy.

The following account by Prof. Wailes‡ for Mississippi is probably as full as any, and appears to be about the only published record for that State: "The Paroquet was formerly very numerous, and often resorted in large flocks to inhabited districts and made himself familiar with the apple orchards. Now (1854) they have become quite scarce and shy, and are seldom seen in flocks of more than half a dozen together." In 1875, Beckham writes,§ "Judge Lawrason, who lives in the country near Bayou Sara, Louisiana, informs me that as late as 1875 he found the Carolina Paroquet every year at his place, but since that date has neither seen nor heard of any in his locality."

For Texas we have but one record,|| which informs us of its being "Quite numerous in the eastern part of the State in 1853, and confining itself to the timberlands of the large streams." This rather vague statement makes it somewhat difficult to place the boundary line. I have placed it, however, between the Brazos and Trinity rivers,—covering to a large extent the same territory over which the Ivory-billed Woodpecker (*Campephilus principalis*) formerly ranged.¶

In company with the Texas record is a statement by the same author that the species is to be found in the Indian Territory; while Cooke informs us** that "Formerly numerous flocks were found all over the reservation, but that at present (1885) it is almost extinct in the eastern part of the Territory, though a few are still found around Caddo, while in the western and

* Gosse, Letters from Alabama, 1859, p. 298.

† Bull. N. O. C., IV, 1879, p. 11.

‡ Geol. & Agric. of Miss. 1854, p. 324.

§ Auk, IV, 1887, p. 303.

|| Woodhouse, Sitgreaves's Rep., p. 89.

¶ Auk, VIII, 1891, p. 14.

** Bird Migr., Miss. Val. 1885, p. 124.

middle parts they are almost as common as ever." In 1880 Mr. D. C. Harrison of the Geological Survey was stationed at Spencer Academy, some twenty miles from Caddo; he found the birds very abundant, describing them as appearing in large flocks like Blackbirds, and on his return brought six specimens with him as mementos of the trip. Mr. A. W. Butler, to whom I am indebted for the following recent information, informs me that an army officer stationed at Fort Gibson, saw and recognized a flock in 1889, which alighted in a tree directly over the spot in which he and his men were encamped. This gentlemen was acquainted with the birds in their Florida haunts, so that there was no chance for error. He reported the fact to Mr. H. K. Coale, who gave the information to Mr. Butler.

For Arkansas there appears to be but one record, and that by Baird, Brewer and Ridgway in 1874, who speak of the occurrence of the Parroquet in considerable numbers there at that date, and of their former abundance throughout the Mississippi Valley.

Audubon informs us that they were plentiful in Ohio about 1807, and could be procured as far north as Lake Erie. Mr. Butler informs me that about 1832 Mr. W. B. Seward found young birds in a hollow tree-top that had been blown down, in White River Valley, about twenty miles from Indianapolis, Indiana. This record, according to Mr. Butler, is thoroughly reliable, and is probably the most northern breeding ground known. In 1856 Haymond wrote* that they were formerly abundant along the White Water River, but that none had been seen for many years, while in the Report of the Geological Survey of the State, published in 1869, Coxe in his list of the birds of Franklin County, records his seeing "a single flock in June many years ago; and old inhabitants say that in the early settlement of the county they were extremely common."

In the Smithsonian collection is a specimen (No. 12272), without date or locality, taken in Illinois by J. K. Townsend, and Pratten includes it in his list.† In 1889 Ridgway speaks of it‡ as "probably everywhere extinct within our borders, though fifty years ago it was more or less common throughout the State."

Kentucky and Tennessee each have one record. For the for-

* Proc. Phil. Acad. Nat. Sci., 1856, p. 293.

† Trans. Ill. State Agric. Soc. for 1853-54, 1855, p. 606.

‡ Nat. Hist. Surv. Ill., I, 1889, p. 399.

mer, Pindar mentions it* as very common in years gone by in Fulton County, and further states that stragglers are said to have been seen as recently as 1878. Wilson records† it for Tennessee as occurring along the Tennessee River in 1811. It undoubtedly occurred in Tennessee at about the same period as in Kentucky.

In the Smithsonian Report for 1864 (1865, p. 438), Hoy mentions it as occurring above Boonville, Missouri in 1854, while Cooke in his 'Bird Migration in Mississippi Valley' reports it as still present at Fayette in 1885 though almost extinct. Trippe speaks‡ of it as occurring in Decatur County, Iowa, as recently as 1873. A specimen in the Smithsonian collection is labeled "Michigan," without date or exact locality. In southern Wisconsin the birds are said to have been formerly quite common.

Coues, in his 'Birds of the Northwest,'§ speaks of the Paroquet in Nebraska as follows: "Among the more interesting ornithological results of Dr. Hayden's investigations, may be mentioned his discovery that this species is abundant at a higher point than is usually recognized," occurring "along the thickly wooded bottoms as far up the Missouri as Fort Leavenworth, possibly as high as the mouth of the Platte." Goss in 1883 mentions|| it as "formerly common in eastern Kansas, but not met with in the State for several years." Taylor in his 'Catalogue of the Birds of Nebraska'¶ refers to it as "Formerly abundant even in the eastern part of the State, but now rare if found at all."

Coues mentions** the occurrence of the Paroquet in Colorado in the following note: "Mr. E. L. Berthoud, of Golden, Colorado, writes under date of Dec. 2, 1876: 'I saw the Carolina Parrot at this place and at Denver, on the S. Platte in 1860-61, and on the Little Thompson River, Col., in 1862.'" This is the most western record for the species, and the only one, so far as known, for the State.

This enumeration by States enables us to draw a comparison by dates between the abundance and wide distribution of the species

* Auk, VI, 1889, p. 313.

† Am. Orn., 1811, p. 91.

‡ Proc. Bost. Soc. Nat. Hist., XV, 1873, p. 233.

§ Coues, Birds N. W., 1879, p. 296.

|| Birds of Kansas, 1883, p. 20.

¶ Taylor, Cat. Birds of Neb., 1887, p. 114.

** Bull. N. O. C., II, 1877, p. 50.

at an early period, and the proportionally few remaining individuals and extremely limited area of today. In 1790-1805 they ranged at times as far north as Albany and Lake Ontario, New York, and as late as 1869 were known in the East in southern Pennsylvania. Another decade (1878) saw stragglers in the Mississippi Valley as far north as the junction of the Ohio and Mississippi Rivers, while the past ten years has witnessed their being driven almost exclusively to southern Florida and the Indian Territory. So scarce have they become within this latter period, that it would appear safe to give as their present habitat the minimum areas represented in black, which cover the localities of capture or observation for the last five years.

In concluding, I wish to express my gratitude for the kindness shown me in compiling the present paper. More especially am I indebted to my friend, Mr. Robert Ridgway, and to the Assistant Secretary of the Smithsonian Institution, Dr. G. Brown Goode, for the use of the Museum material, and to Mr. A. W. Butler for valuable information from his own still unpublished notes on the same subject. To these gentlemen I wish to express my warmest thanks and appreciation.

RECENT LITERATURE.

Sharpe's 'Review of Recent Attempts to Classify Birds.'*—Of the many important addresses, memoirs, and reports read before the Second International Ornithological Congress held at Budapest in May last, we have space to notice at present only Dr. Sharpe's notable address on the Classification of Birds. Only the first 55 pages, or a little more than one half of the address, is devoted to a review of previous work, the remainder being given to a formal exposition of the author's own views on the subject. The review practically begins with Huxley's 'Classification of Birds,' published in 1867, and thus relates to the work of the last twenty-five years. An epitome, with some critical comment, is given of Huxley's system, of Garrod's scheme (published in 1874), of Forbes's (1884), of Sclater's (1880), of Newton's views (1884), Reichenow's system (1882),

*A Review of Recent Attempts to Classify Birds; an Address delivered before the Second International Ornithological Congress on the 18th of May, 1891. By R. Bowdler Sharpe, LL.D., F. L. S., etc. (Zoological Department British Museum.) Budapest, 1891. (Published at the Office of the Congress.) Roy. 8vo. pp. 90, pll. xii.